



**NYSE FANG+[®] Index
(NYFANG)**

Version 2.3
Valid from
April 8, 2022

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Version History:

Version 2.3 (Effective April 8, 2022)

This version adds the Daily 2x Leveraged Index (Interest Rate Adjusted) and Daily 2x Leveraged Index (Interest Rate Adjusted TR) variants of the Index.

Version 2.2 (Effective March 11, 2021)

This version adds a Net Total Return variant, INR currency variant, and 3x and -3x Leveraged Price and Total Return variants of the Index. The methodology is also updated to reflect the creation of the media & communications sector and provide more details on the process used to select Index constituents. Other sections are modified to reflect updated language, while making no changes to the rules underlying the Index.

Version 2.1 (Effective June 15, 2018)

This version incorporates a change to the rebalance announcement schedule and adds a daily settlement value index and 2x, 1.5x, -1x, -2x, -1.5x Leveraged Price and Total Return variants.

Version 2.0 (Effective April 20, 2018)

The new methodology format for the NYSE FANG+® Index (NYFANG) is being released to provide greater details and clarity into the Index governance, structure, and maintenance. There is also an update being made to the announcement date for the quarterly Index rebalances the correction of index calculations and the announcement policy. There are also additional currency variants of the Index being included in the methodology.

Version 1.0 (Effective September 26, 2017)

The methodology document covers the newly-launched NYSE FANG+® Index.

1. Index Description

The NYSE FANG+® Index is an equal-dollar weighted Index designed to track the performance of highly-traded growth stocks of technology and tech-enabled companies in the technology, media & communications and consumer discretionary sectors such as Facebook®, Apple®, Amazon®, Netflix®, and Alphabet's Google®. NYSE FANG+® Leveraged and Inverse indices are designed to provide exposure to the daily leveraged or inverse returns of the underlying NYSE FANG+® Index, as per the relevant ratio, without incorporating the returns from interest rates and/or financing charges. Index compositions and corporate actions, including rebalancing information, can be accessed from the ICE Index Platform at indices.theice.com.

1.1 Summary information

Full Name	NYSE FANG+® Index
Index Tickers	See table below
Eligible Stocks	Common stocks, ADRs or GDRs of companies listed on selected U.S. exchanges
Number of Constituents	Variable, with a minimum of 10 stocks
Weighting	Equal weighted
Index Reconstitutions	The Index is reconstituted quarterly after the close of the third Friday of March, June, September, and December ("Reconstitution Date").
Base Date	September 19, 2014
Base Level	1000.00
Historic Data Available Since	September 19, 2014
Launch Date	September 26, 2017 (USD Price Return / Gross Total Return Indices)
Website	indices.theice.com

1.2 Index symbols and variants

Index Type	Symbol	Index Name	Currency	Publication Frequency / Hours	Refinitiv	Bloomberg
Price Return	NYFANG	NYSE FANG+® Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANG	NYFANG <INDEX>
Gross Total Return	NYFANGT	NYSE FANG+® Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANGT	NYFANGT <INDEX>
Net Total Return	NYFANGNT	NYSE FANG+® Index (NTR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANGNT	NYFANGNT <INDEX>
Opening Settlement Value	NYFANGST	NYSE FANG+® Index Opening Settlement Value	USD	Once a month on the 3rd Friday between 9:30 AM & 6:00 PM ET	.NYFANGST	NYFANGST <INDEX>
Daily Opening Settlement Value	FANGST	NYSE FANG+® Index Daily Opening Settlement Value	USD	Once daily between 9:30 AM & 6:00 PM ET	.FANGST	FANGST <INDEX>
Price Return (JPY)	NYFANGJ	NYSE FANG+® Index (JPY)	JPY	Once daily after 10:00 JST	.NYFANGJ	NYFANGJ <INDEX>
Gross Total Return (JPY)	NYFANGJT	NYSE FANG+® Index TR (JPY)	JPY	Once daily after 10:00 JST	.NYFANGJT	NYFANGJT <INDEX>
Price Return (INR)	NYFANGI	NYSE FANG+® Index (INR)	INR	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANGI	NYFANGI <INDEX>
Gross Total Return (INR)	NYFANGIT	NYSE FANG+® Index TR (INR)	INR	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANGIT	NYFANGIT <INDEX>
Net Total Return (INR)	NYFANGIN	NYSE FANG+® Index NTR (INR)	INR	Every 1 sec between 9:30 AM & 6:00 PM ET	.NYFANGIN	NYFANGIN <INDEX>
Daily 1.5x Price Return	FANG15X	NYSE FANG+® Daily 1.5x Leveraged Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANG15X	FANG15X <INDEX>
Daily 1.5x Gross Total Return	FANGT15X	NYSE FANG+® Daily 1.5x Leveraged Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANGT15X	FANGT15X <INDEX>
Daily 2x Price Return	FANG2X	NYSE FANG+® Daily 2x Leveraged Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANG2X	FANG2X <INDEX>
Daily 2x Price Return (IR Adjusted)	FANG2XI	NYSE FANG+® Daily 2x Leveraged Index (Interest Rate Adjusted)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANG2XI	FANG2XI <INDEX>
Daily 2x Gross Total Return	FANGT2X	NYSE FANG+® Daily 2x Leveraged Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANGT2X	FANGT2X <INDEX>
Daily 2x Gross Total Return (IR Adjusted)	FANGT2XI	NYSE FANG+® Daily 2x Leveraged Index (Interest Rate Adjusted TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANGT2XI	FANGT2XI <INDEX>
Daily 3x Price Return	FANG3X	NYSE FANG+® Daily 3x Leveraged Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANG3X	FANG3X <INDEX>
Daily 3x Gross Total Return	FANGT3X	NYSE FANG+® Daily 3x Leveraged Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.FANGT3X	FANGT3X <INDEX>
Daily -1x Price Return	DFANG1X	NYSE FANG+® Daily 1x Inverse Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANG1X	DFANG1X <INDEX>

Index Type	Symbol	Index Name	Currency	Publication Frequency / Hours	Refinitiv	Bloomberg
Daily -1x Gross Total Return	DFANGT1X	NYSE FANG+® Daily 1x Inverse Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANGT1X	DFANGT1X <INDEX>
Daily -1.5x Price Return	DFNG15X	NYSE FANG+® Daily 1.5x Inverse Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFNG15X	DFNG15X <INDEX>
Daily -1.5x Gross Total Return	DFNGT15X	NYSE FANG+® Daily 1.5x Inverse Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFNGT15X	DFNGT15X <INDEX>
Daily -2x Price Return	DFANG2X	NYSE FANG+® Daily 2x Inverse Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANG2X	DFANG2X <INDEX>
Daily -2x Gross Total Return	DFANGT2X	NYSE FANG+® Daily 2x Inverse Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANGT2X	DFANGT2X <INDEX>
Daily -3x Price Return	DFANG3X	NYSE FANG+® Daily 3x Inverse Index	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANG3X	DFANG3X <INDEX>
Daily -3x Gross Total Return	DFANGT3X	NYSE FANG+® Daily 3x Inverse Index (TR)	USD	Every 1 sec between 9:30 AM & 6:00 PM ET	.DFANGT3X	DFANGT3X <INDEX>

2. Governance

Index Sponsor & Administrator

ICE Data Indices, LLC (“IDI”) is the Index Sponsor and the Index Administrator of the NYSE FANG+® Index (the “Index”).

IDI is responsible for the day-to-day management of the Index in accordance with its rules, including retaining primary responsibility for all aspects of the Index determination process, including implementing appropriate governance and oversight, as required under the International Organization of Securities Commission’s Principles for Financial Benchmarks (the IOSCO Principles). The IDI Governance Committee is responsible for helping to ensure IDI’s overall compliance with the IOSCO Principles, by performing the Oversight Function which includes overseeing the development, design, issuance and operation of the Indices, as well as reviewing the control framework. IDI is also responsible for decisions regarding the interpretation of these rules and the IDI Governance Committee is responsible for reviewing all rule book modifications with respect to the Index to ensure that they are made objectively, without bias, and in accordance with applicable law and regulation and IDI’s policies and procedures. Consequently, all IDI and IDI Governance Committee discussions and decisions are confidential until released to the public.

Periodic review of Index rules

The Index is constructed based on a defined set of rules which spell out all pertinent details of how it is compiled. The Index rules specify the criteria for selecting constituent securities. The rules also establish the methodologies for weighting, valuing and rebalancing the constituents. Rules and methodologies are reviewed periodically, in accordance with IDI’s policies and procedures, to ensure the Index continues to meet its objective. IDI shall announce changes in rules and methodologies, along with their implementation dates, in accordance with its policies and procedures. IDI consults with stakeholders on proposed material changes that affect the Index prior to making such changes, in accordance with IDI’s consultation policy:

<https://www.theice.com/market-data/indices/regulation>.

Rule book changes

The IDI Governance Committee reviews all rule book modifications and Index changes to ensure that they are made objectively, without bias and in accordance with applicable law and regulation and IDI’s policies and procedures. These rules may be supplemented, amended in whole or in part, revised or withdrawn at any time in accordance with applicable law and regulation and IDI applicable policies and procedures. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the Index is compiled or calculated or affect the Index in another way.

Cases not covered in rules

In cases which are not expressly covered in these rules, operational adjustments are made, as needed, to ensure the Index meets its intended objectives. Operational adjustments may also take place if, in the opinion of the Index Administrator, it is desirable to do so to maintain a fair and orderly market in derivatives on this Index and/or this is in the best interests of the investors in products based on the Index and/or the proper functioning of the markets. Any such modifications described under this section or exercise of Expert Judgment will also be governed by any applicable policies, procedures and Guidelines in place by IDI at such time.

Limitations of the Index

All indices produced by IDI (the “Indices”) may be subject to potential limitations, such as a decline in the pool of available eligible securities, changes in the economy, changes in regulation or accounting rules, consolidation in certain sectors or industries, or other factors. Other limitations may include the ability of the Benchmark to operate in illiquid or fragmented markets.

By design, this Index is focused on tracking the performance of highly-traded growth stocks of technology and tech-enabled companies in the technology, media & communications and consumer discretionary sectors. Should the underlying markets transform due to consolidation or other reasons, the composition of the Index will adjust and change accordingly.

IDI seeks to manage and mitigate these limitations through the Index design, review and oversight process.

3. Publication

3.1 Publication of Index values.

Opening

The first Index level is calculated and published at 9:30 ET (Eastern Time). The calculation of that level utilizes the most updated prices available at that moment. In the case of constituents that have a non-traded, halted or suspended status, or have not opened for the current day, the previous day's reference prices (typically primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used.

Dissemination frequency

The levels of the USD and INR price return, gross total return, net total return, and leveraged and inverse Indices are published every 1 second to the ICE Consolidated Feed. The calculated Index levels incorporate the latest traded price of each constituent from within the regular trading session of their respective market. Intraday calculations of the Index incorporate trades on a consolidated level from all exchanges including those not designated as the official primary exchange. The Indices are calculated on those days specified as Index Business Days. Index Business Days are days on which U.S. exchanges (NYSE, NASDAQ, Cboe) are open for a full or partial day of trading.

The levels of the JPY price return and gross total return Indices are calculated and published once daily on every weekday, shortly after the release of the Bank of Tokyo-Mitsubishi UFJ Exchange Quotations at 10:00 AM JST.

Closing level

The closing level is the last level disseminated on the trading day and uses the official close prices from the primary listing market for each constituent. For constituents that have non-traded, halted or suspended status, or have not opened for the current day, the previous day's reference prices (typically primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used instead. In the case of exceptional market conditions, the Index Administrator reserves the right to utilize other prices in the calculation of the official closing level, as indicated below in Section 3.2.

Data sources

The ICE Consolidated Feed, which is obtained from ICE Data Services, is the primary market data source for equity real-time and closing prices. Currency rates used in the intraday calculation of the Index are sourced from ICE Data Derivatives. Currency rates used in the closing calculation of the Index are sourced from either the WM/Refinitiv spot FX benchmarks provided by Refinitiv or for the JPY variants, the Bank of Tokyo-Mitsubishi UFJ Exchange Quotations. Sector classifications

are based on the ICE Uniform Sector Classification schema. Additional sources of data include market data vendors, company announcements, exchange announcements and other official sources.

3.2 Exceptional market conditions and corrections

The Index Administrator retains the right to delay the publication of the opening level of the Index or suspend the publication of the level of the Index if it believes that circumstances prevent the proper calculation of the Index.

If Index constituent intraday prices are cancelled or revised, the Index will not be recalculated unless the Index Administrator decides otherwise.

Reasonable efforts are made to ensure the correctness and validity of data used in real-time Index calculations. Where errors have occurred in the determination or calculation of an Index closing value, the decision to make a restatement will be assessed on a case by case basis. Such decision will take account of the significance, impact, age and scale of the error.

There is the possibility of an exchange or market-wide event resulting in the normal closing auction, or official closing prices, not being available. In those situations, the Index Administrator will take guidance from the respective exchange(s) and determine an appropriate course of action on an event-by-event basis. Exchange or market-wide events include, but are not limited to, the following:

- Volatility Halts
 - LULD (Limit Up / Limit Down)
 - Market Wide Circuit Breaker
- Technological Problems / Failures
- Natural Disaster or Other BCP-Related Event

3.3 Changes to the Index

Announcement policy

Changes to the Index methodology are announced on the ICE Index Platform at indices.theice.com.

As a general rule, the announcement periods relating to the addition and removal of constituents that are mentioned below will be applied. However, emergency actions, including urgently required corporate action treatments, often resulting from late notices from the relevant company or exchange, may require the Index Administrator to deviate from the standard timing.

Reconstitution constituent changes

The addition or removal of constituents typically occurs during the quarterly Reconstitutions and are announced after the close of trading on the second Friday of the Reconstitution month. For example, for a Reconstitution effective for March 22, 2021, the announcement would occur after the close on March 12, 2021. Their corresponding new Index shares are announced after the close of trading on the third Friday of the Reconstitution month. The new Index composition

can be accessed on the ICE Index Platform at indices.theice.com. Constituents may also be added to or removed from the Index as a result of corporate actions as described below.

Corporate actions

In case of a corporate action that affects one or more constituents, the Index Administrator will publish an announcement explaining its treatment in the Index shortly after the firm details have become available and have been confirmed. When possible, the addition or removal of a constituent is announced at least three trading days before the effective date of the change. However, depending on the availability of public information, less advance notice may be given. In the case of mergers and acquisitions, every effort is made to remove the company at some reasonable time ahead of the suspension in trading in the acquired company. There are certain situations and corporate actions that require the removal of a company that has already ceased trading. In those cases, the company is removed from the Index at its last traded price, or, at the discretion of the Index Administrator, at a derived price that most accurately represents its post-suspension value. Once a corporate action has been actioned in the Index, the Index Administrator confirms the changes and final terms such as Index divisor in a separate announcement.

4. Calculation

4.1 Calculation of the Index

The Index is calculated on a price return, gross total return and net total return basis. The current Index level is calculated by dividing the current modified Index market capitalization by the Index divisor. The divisor was set on the Index Inception Date (i.e. the backtest start date) to yield an Index level of 1000.00. The divisor is updated as a result of corporate actions and composition changes.

The Leveraged and Inverse Index variants are calculated by multiplying a leverage factor to the daily percentage change in the base index and applying that return to the previous day's leveraged or inverse index close.

The Interest Rate Adjusted Leveraged and Inverse variants of the Index are calculated based on a formula specified in the ICE Equity Index Methodology which is found at indices.theice.com. The Overnight USD London Interbank Offered Rate (LIBOR) is used in this formula for Index Business Days up to and including April 2, 2018, and the Secured Overnight Financing Rate (SOFR) is used thereafter.

The JPY variants of the Index are calculated by utilizing the USD levels of the Index and performing a conversion with the Bank of Tokyo-Mitsubishi UFJ Exchange Quotations released at 10:00 AM JST.

The closing level of all other currency variants of the Index is calculated by utilizing the current day's London 4:00 PM WM/Refinitiv Spot FX rate, or if not available, the prior day's relevant London 4:00 PM WM/Refinitiv Spot FX rate.

A full description of the formulae used to calculate Index values can be found in the "NYSE Indices - Guide to Index Mathematics" at indices.theice.com.

5. Index Reconstitutions

5.1 General aim of Reconstitutions and frequency

General aim of the periodical Reconstitution

The general aim of the quarterly Reconstitutions of the Index is to ensure that the selection and weightings of the constituents continue to reflect, as closely as possible, the Index's objective. The Index Administrator reserves the right to, at any time, change the number of stocks comprising the Index by adding or deleting one or more stocks, or replacing one or more stocks contained in the Index with one or more substitute stocks of its choice, if in the Index Administrator's discretion such addition, deletion or substitution is necessary or appropriate to maintain the quality and/or character of the Index. Such Index constituent changes or decisions are reviewed by the IDI Governance Committee to ensure that they are made objectively, without bias and in accordance with applicable law and regulation and IDI's policies and procedures.

Frequency

Changes to the Index composition and constituent weights may occur during a scheduled Reconstitution and as a result of the removal of an Index constituent. The Index is reconstituted quarterly after the close of the third Friday of March, June, September, and December ("Reconstitution Date"). The company-specific revenue data and other information used to reconstitute the Index is as of the second Friday of the Reconstitution month, with exception of the prices used to determine new Index shares, which is as of the third Friday of the Reconstitution month.

5.2 Index universe and selection principle

Constituent Selection and Weighting Schema

The following rules are used for the initial constituent selection and ongoing Reconstitutions.

1. Starting universe: Common stocks, ADRs, or GDRs of companies that have a primary listing on the following U.S. exchanges:

Exchange	Country
New York Stock Exchange	United States
NASDAQ	United States
NYSE American	United States
NYSE Arca	United States
Cboe BZX	United States

2. Securities must be classified within the Consumer Discretionary, Media & Communications or Technology sectors based on the ICE Uniform Sector Classification schema.
3. Securities must have a full company market capitalization (including all listed and unlisted share classes) of at least \$5 billion.
4. Securities must have been seasoned (been actively trading) for at least six months on the specific share class included in the Index.
5. Securities must have a trailing six-month average daily traded value (ADTV or daily turnover) of at least \$50 million on the specific share class included in the Index.
6. For any securities with multiple qualifying share classes, the most liquid share class is included in the Index based on its trailing six-month ADTV in Step 5.
7. Securities are excluded from the universe if they are not representative of the high-growth technology and internet/social media industry. Qualifying companies have significant revenue exposures to one or more of the areas of search, social networking, autonomous driving, electric vehicles, smartphones, mobile payments, e-commerce, online games, streaming media, online entertainment, cryptocurrencies and blockchain, big data, artificial intelligence, machine learning, digital advertising, cloud services and other innovative technologies.
8. An Index advisory committee is responsible for the selection of a minimum of 10 securities from the above-qualifying candidates for inclusion in the Index. The advisory committee's selections are subject to the review and approval of the IDI Governance Committee.
9. If a corporate action leads to the removal of a security in between the quarterly Reconstitutions, then the Index advisory committee is responsible for the selection of a replacement security to be added to the Index at the current Index weight of the security being deleted, subject to review and approval by the IDI Governance Committee. Replacements in the Index are announced after the close of trading on the third Index Business Day prior to effectiveness.

5.3 Weighting methodology and periodical update of weighting

Each of the constituents in the Index is equally weighted at the quarterly Reconstitutions and percentage weights are converted to Index shares at the time of Reconstitution effectiveness using information from the third Friday of the Reconstitution month. The newly adjusted portfolio becomes the basis for the Index's value effective on the first trading day following the quarterly adjustments. The divisor is adjusted to ensure continuity of the Index's value.

5.4 Special considerations for Index backtest

Corporate actions were adjusted for in the Index backtest; however, the exact treatment in the backtest and live Index may differ due to differences in timing and knowledge of those actions.

6. Corporate Actions

6.1 General

Apart from normal Reconstitution changes, the Index composition may be adjusted at other times in order to maintain the continuity of the Index level and the Index composition in accordance with its objective. Adjustments take place in reaction to events that occur with constituents in order to mitigate or eliminate the effect of that event on the Index performance.

A full description of standard corporate action events and their handling can be found in the “NYSE Indices - Corporate Action Handling Guide” at indices.theice.com.

7. Disclaimer

The products and services mentioned herein solely in relation to the Indices (each an “Index”) may not be available in all jurisdictions. This document does not constitute an offer of services in jurisdictions or circumstances where ICE Data Indices, LLC (“IDI”) does not have the necessary or appropriate licenses or approvals for the offering of the products and services described herein. Each Index provides a general investment strategy, does not take into account any of the specific needs or financial circumstances of any person, entity or group of persons and should not be considered investment advice. All information provided by IDI, including without limitation, any materials that describe any Index, is of general nature only.

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is appropriate for their purposes and circumstances. Prospective investors should consult with an attorney, tax advisor, or accounting professional regarding any specific legal, tax, or accounting situation, or the impact of making any particular investment decision. Inclusion of a security within an Index is not a recommendation by IDI to buy, sell, or hold such security, nor is it considered to be investment advice.

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Historical returns and weights before the launch date of an Index are based upon backtested data. For the period prior to the launch date of an Index, simulated performance data has been provided as an illustration of how the Index would have performed during the relevant period had the Index been calculated by IDI using the current Index methodology. Such simulated performance data has inherent limitations, as the simulated data is produced by the retroactive application of the methodology. Simulated performance data is based on criteria applied retroactively with the benefit of hindsight and knowledge of factors that may have positively affected its performance and may reflect a bias toward strategies that have performed well in the past.

Intercontinental Exchange, Inc., the ultimate parent company of IDI, keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of Intercontinental Exchange, Inc. may have information that is not available to other business units. IDI has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process. There is no obligation on IDI to disclose information held by it in relation to any Index to other parties.

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